

Appl. No. : 09/511,934
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(i) a cleaning gas controller for introducing a cleaning gas into the reaction chamber and evacuating the reaction chamber after the cleaning treatment;

(ii) a cleaning gas activator for activating the cleaning gas in radical form; and

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(iii) a temperature and timing controller comprising a program including a cleaning sequence which is activated after completion of film formation, said cleaning sequence programmed to (1) introduce an inert gas to the reaction chamber to obtain a predetermined pressure, (2) reduce the temperature of the susceptor at a predetermined rate for cleaning, at the predetermined pressure, (3) when reaching a cleaning temperature which is lower than the film formation temperature, actuate the cleaning gas controller and the cleaning gas activator, and (4) evacuate the reaction chamber.

REMARKS

Claim 1 has been amended to clarify that the susceptor is made of aluminum nitride and an inert gas is introduced to obtain a predetermined pressure. Support for this amendments can be found in the paragraphs beginning at page 7, line 12, at page 10, line 15, at page 14, line 7, and at page 16, line 7, for example. The amendments simply specifies the material of the susceptor and the function of an inert gas without adding new elements. Thus, no new matter has been added, and no new issue has been raised. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE." Applicants respectfully request entry of the amendments and reconsideration of the application in view of the amendments and the following remarks.

Rejection of Claims 1-10 Under 35 U.S.C. § 103

Claims 1-10 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Frankel in view of Kao. However, a combination of Frankel and Kao could not lead to the claims as amended herein as explained below.

The Examiner asserts that Claim 1 would have been obvious because of the following reasons:

"Frankel et al. do not disclose the step of inert gas flow and reduction of susceptor temperature prior to start of the cleaning gas activation. Kao et al. disclose introduction of inert gas prior to introduction of reactive cleaning gas (Abstract) and preferred temperature range of pedestal during the cleaning process to be 400-700°C (Col 17-line 59-63)."